

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

DONALD L. BRODIGAN, et al.

Serial No.: 09/514,033

Filed: February 25, 2000

For: METHOD AND SYSTEM FOR PROVIDING INTERACTIVE PROGRAMMING

Attorney Docket No.: 1589 (USW 0563 PUS)

Group Art Unit: 2623

Examiner: Annan Q. Shang

**APPEAL BRIEF UNDER 37 C.F.R. § 41.37**

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Sir:

This is an Appeal Brief from the final rejection of claims 1-11 of the Office Action mailed on November 3, 2006 for the above-identified patent application.

**I. REAL PARTY IN INTEREST**

The real party in interest is Qwest Communications International Inc. (“Assignee”), a corporation organized and existing under the laws of the state of Delaware, and having a place of business at 1801 California Street, Denver, Colorado 80202.

**II. RELATED APPEALS AND INTERFERENCES**

There are no appeals, interferences, or judicial proceedings known to the Appellants, the Appellants’ legal representative, or the Assignee which will directly affect or be directly affected by or have a bearing on the Board’s decision in the pending appeal.

### **III. STATUS OF CLAIMS**

Claims 1-11 are pending in this application. Claims 1-11 have been rejected and are the subject of this appeal.

### **IV. STATUS OF AMENDMENTS**

A response after final rejection was filed on January 10, 2007. The response did not include any proposed amendments.

### **V. SUMMARY OF CLAIMED SUBJECT MATTER**

The invention relates to bidirectional transmission of data over a broadband network in real-time. Page 1, lines 4-5. It is desirable to be able to allow for delivery of specified video content to designated users that can be responded to on a real-time and interactive basis. Page 1, lines 15-17.

As defined by independent claim 1 and exemplified in Figures 1 and 2, the invention comprehends a method for providing personalized interactive programming over a data path. The data path extends between a service provider 12 and a set top box 30. The service provider 12 is connected to a data network 22 and has an address. A communication path is established between a broadband digital terminal 24 and the set top box 30. The broadband digital terminal 24 is connected to the data network 22. The service provider 12 broadcasts video through the broadband digital terminal 24 to the set top box 30. (Figure 2, block 52.) A private data packet is sent in addition to the broadcast video from the service provider 12 over the network 22 and through the broadband digital terminal 24 to the set top box 30. The packet contains application interface information for the service provider 12 and contains the service provider address. (Figure 2, block 54.) An impulse pay-per-view communication path is established from the set top box 30 through the broadband digital terminal 24 and over the network 22 to the service provider 12 based upon the address to allow interactive programming using the application interface information between the service

provider 12 and the set top box 30 to personalize the broadcast programming. (Figure 2, block 56.) Page 2, lines 13-23; page 4, lines 2-17; page 5, lines 19-28.

As exemplified in Figure 1, local broadcast server 14 or Internet service provider 16 (ISP) on Internet 15 that desires exposure and the ability to engage in bidirectional communication with subscribers to the broadband network may send a private data packet (PDP) transmission to the head end 10 (at service provider 12) as shown at exemplary MPEG2 source 18. Page 4, lines 18-25; page 7, lines 7-20.

As defined by independent claim 5 and exemplified in Figures 1 and 2, the invention comprehends an interactive video/data system for interacting with a destination address on a network 22. The system comprises a broadcast source 18 at the destination address for transmitting a private data packet over a private virtual channel (ATM PVC 20) on the network 22. The packet contains application interface information and the destination address. The system further comprises a broadband digital terminal 24 receiving the packet over the private virtual channel (ATM PVC 20) from the broadcast source 18. A set top box 30 receives the packet from the broadband digital terminal 24, and cooperates with the broadband digital terminal 24 and the broadcast source 18 to establish an impulse pay-per-view data path extending from the set top box 30 to the broadband digital terminal 24, and over the private virtual channel (ATM PVC 20) to the broadcast source 18 at the destination address. The data path allows application interface information to be communicated in real-time between the set top box 30 and the broadcast source 18. Page 2, line 26 - page 3, line 7; page 4, lines 2-25; page 7, lines 7-20.

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Claims 1-11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Pinder et al. (U.S. Pat. No. 5,742,677) in view of Anderson et al. (U.S. Pat. No. 6,219,042).

## **VII. ARGUMENT**

**A.     Claims 1-11 Are Patentable Under  
35 U.S.C. § 103(a) Over Pinder et al.  
(U.S. Pat. No. 5,742,677) In View Of  
Anderson et al. (U.S. Pat. No. 6,219,042)**

In the Final Action, the Examiner has rejected claims 1-11 under 35 U.S.C. § 103(a) as being unpatentable over Pinder in view of Anderson. Appellants believe that the claimed invention is patentable over Pinder in view of Anderson.

As recited by each independent claim, a private data packet is sent over the network and through the broadband digital terminal to the set top box. The packet contains application interface information for the service provider/broadcast source, and contains the service provider/broadcast source address. An impulse pay-per-view communication path is established from the set top box through the broadband digital terminal and over the network to the service provider/broadcast source. This allows interactive programming using the application interface information between the service provider/broadcast source and the set top box to personalize the broadcast programming.

The private data packet is sent, for example, between MPEG2 frames of broadcast video. The contained application interface information (API) and service provider address (IP address) allow personalized/interactive broadcast programming.

Pinder describes an information terminal having reconfigurable memory. According to Pinder, a trust hierarchy is arranged such that a service provider may communicate messages directly with the subscriber terminal without headend intervention. A trusted provider sends commands and data to, and may reconfigure the memory of, the terminal. The Examiner states that Pinder fails to teach where the messages include broadcast video, etc. and relies on Anderson as a secondary reference. Appellants believe that the shortcomings of Pinder are greater than acknowledged by the Examiner. Specifically, Pinder

does not suggest the claimed private data packet containing application interface information for the service provider and containing the service provider address sent along with the broadcast video, as claimed, and also does not suggest the claimed interactive programming using the application interface from the private data packet.

Regarding the private data packet, the Examiner has made reference to Pinder at col. 4, l. 43 - col. 5, l. 29 and mentioned the transmitting by the service provider of their address, logo and graphics data. This portion of Pinder is only describing that certain information about the service provider may be transmitted in the clear and gives address, logo and graphics data as examples. These in the clear transmissions and their counterpart encrypted transmissions have nothing to do with the claimed invention.

Note that the claims recite specific content for the private data packet — the application interface information — and these contents enable interactive programming to personalize the broadcast programming.

Regarding Anderson, Anderson does not overcome the shortcomings of Pinder.

With regard to Anderson, Anderson describes selective re-establishment of Internet connectivity based on duration of user activity. Anderson describes toggling between a television viewing mode and an Internet browsing mode in response to user input. Although Anderson describes integrating television viewing and Internet browsing, there is no suggestion of the claimed private data packet containing application interface information for the service provider/broadcast source and the claimed interactive programming, let alone any suggestion to modify Pinder in view of Anderson to achieve the claimed invention.

The Examiner simply states that Anderson describes transmitting web pages with additional enhanced features. However, the claims recite specific limitations that are not

met by Anderson, and the Examiner has not pointed out these features in Anderson. Specifically, Anderson does not overcome the shortcomings of Pinder with regard to the private data packet containing application interface information sent from the service provider/broadcast source to allow interactive programming.

The Examiner makes reference to Col. 2, l. 48 - Col. 3, l. 12 and Col. 4, l. 45 - Col. 5, l. 23 of Anderson. The first portion of Anderson referred to by the Examiner simply describes integrating Internet browsing and television viewing with a user interface display having an Internet mode and a television mode. The second portion of Anderson referred to by the Examiner further describes accessing television and Internet related services. Figure 3 does show the Internet mode selectively having a small television window 98 displaying television programming during Internet browsing. Nevertheless, Anderson is describing an Internet mode and a television mode, and there is no suggestion in Anderson or Pinder of the claimed private data packet, application interface, and interactive programming.

With regard to motivation, the Examiner states that it would have been obvious to combine the references “as additional enhancement to the display terminal that entices the user to order IPPV video.” First, Anderson does not overcome the shortcomings of Pinder; neither Pinder nor Anderson teach the private data packet containing application interface information. Second, the noted claim features relate to application interface information in a private data packet for interactive programming, and it is unclear how the motivation stated by the Examiner would motivate one to modify Pinder to include such features.

In summary, the Examiner states that Pinder fails to describe broadcast video. Appellants believe that Pinder fails to describe the private data packet and application interface features together with the broadcast video. The Examiner states that it would be obvious, in view of Anderson, to enhance the display terminal of Pinder. Appellants believe that Anderson describes a television viewing mode and an Internet browsing mode, but does not overcome

the deficiencies of Pinder. After all, Anderson does not suggest to modify Pinder to send a private data packet including an application interface from the video/service provider to allow interactive programming in the claimed way.

The fee of \$500 as applicable under the provisions of 37 C.F.R. § 41.20(b)(2) was previously paid. Please charge any additional fee or credit any overpayment in connection with this filing to our Deposit Account No. 02-3978.

Respectfully submitted,

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Enclosure - Appendices

### **VIII. CLAIMS APPENDIX**

1. A method for providing personalized interactive programming over a data path, the data path extending between a service provider and a set top box, the service provider being connected to a data network and having an address, the method comprising:

establishing a communication path between a broadband digital terminal and the set top box, the broadband digital terminal being connected to the data network and the service provider broadcasting video through the broadband digital terminal to the set top box;

sending a private data packet in addition to the broadcast video from the service provider, over the network and through the broadband digital terminal to the set top box, the packet containing application interface information for the service provider and containing the service provider address; and

establishing an impulse pay-per-view communication path from the set top box through the broadband digital terminal and over the network to the service provider based upon the address to allow interactive programming using the application interface information between the service provider and the set top box to personalize the broadcast programming.

2. The method for providing personalized interactive programming over a data path of claim 1 wherein sending the private data packet is performed by inserting the private data packet between frames of a video transmission.

3. The method for providing personalized interactive programming over a data path of claim 2 wherein the video transmission is prerecorded programming that is transmitted on demand.

4. The method for providing personalized interactive programming over a data path of claim 2 wherein the video transmission is real-time programming.

5. An interactive video/data system for interacting with a destination address on a network, the system comprising:

a broadcast source at the destination address for transmitting a private data packet over a private virtual channel on the network, the packet containing application interface information and the destination address;

a broadband digital terminal receiving the packet over the private virtual channel from the broadcast source; and

a set top box receiving the packet from the broadband digital terminal, and cooperating with the broadband digital terminal and the broadcast source to establish an impulse pay-per-view data path extending from the set top box to the broadband digital terminal, and over the private virtual channel to the broadcast source at the destination address, the data path allowing application interface information to be communicated in real-time between the set top box and the broadcast source.

6. The interactive video/data system of claim 5 further comprising a television receiving video transmissions from the set top box.

7. The interactive video/data system of claim 5 further comprising an optical network unit between the broadband digital terminal and the set top box.

8. The interactive video/data system of claim 7 further comprising a network interface device between the optical network unit and the set top box.

9. The interactive video/data system of claim 5 wherein the private data packet is inserted between frames of a video transmission.

10. The interactive video/data system of claim 5 wherein the broadcasting source is a local server.

11. The interactive video/data system of claim 5 wherein the broadcasting source is an Internet service provider.

**IX. EVIDENCE APPENDIX**

None.

**X. RELATED PROCEEDINGS APPENDIX**

None.